

REMARKS

Claims 1 and 3-14 were pending in this Application as of the Advisory Action of July 21, 2009. Claims 1 and 3-14 are cancelled herewith. Claims 15-37 are added.

Novelty and Non-Obviousness regarding new claims 15-36

Regarding claims 15-35, Applicant respectfully submits that claims 15-35 are neither anticipated by nor obvious over United States Publication No. 2004/0193273 to Huang (“Huang” hereinafter) for the following reasons:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In addition, for an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Applicant’s claim 15 and 36 recite:

“two plate-shaped or cup-shaped rigid half-shells, each of the half shells being configured to be fixed to one of two vertebrae adjacent to an intervertebral disc to be replaced, the two rigid half-shells being disposed on respective sides of a compression pad and secured thereto.”

Huang does not teach two rigid half-shells disposed on respective sides of a compression pad *and secured thereto*. On the contrary, referring first to Figure 2 and paragraphs 0044 and 0034, Huang teaches a prosthetic intervertebral disc comprising a pivot ball 14 axially protruding

downwardly from an upper fusion member 1, and a cushion coupler comprising an upper cushioning portion 32 to be slidably contacted with the upper fusion portion 1. Also disclosed is a spherical recess in a central portion of the upper cushion portion 33 to be universally engageable with the pivoting ball 14.

Furthermore, with pertinent reference to paragraph 0038, Huang teaches an annular chamber A formed in the prosthetic intervertebral disc and filled with a buffer liquid intended for *lubricating the contacting surfaces of the two corresponding elements, including the pivoting ball 14 and the spherical recess 34*. Such lubrication precludes a securing of the half shells to the compression pad, as is now recited in Applicant's claim 15 and 36, and claims 16-35 that depend from claim 15.

In fact, if the Huang prosthesis were to be *pro arguendo* modified such that the cushion coupler 3 were secured to the upper and lower fusion members, the rotational contact taught in Huang (and referenced above) would no longer be possible. Without this rotational contact, the contacting surfaces (and overall prosthesis) of Huang would be rendered inoperable for its intended purposes. Accordingly, such a modification would be improper under MPEP 2143.01V.

As none of United States Patent No. 6,582,468 to Gauchet ("Gauchet" hereinafter), United States Patent No. 4,759,769 to Hedman ("Hedman" hereinafter), and United States Publication No. 2003/0074067 to Errico ("Errico" hereinafter) remedy the deficiencies of Huang, Applicant respectfully asserts that Applicant's claims 15-36 are neither anticipated by or obvious over the references cited in the Final Office Action of March 23, 2009.

With further, individual reference to claim 36, it is further recited *inter alia*:

"compression pad including a core portion operatively engaged between the hollow shaft and the stud and an outer ring portion disposed operatively of the core portion, wherein the core portion of the compression pad comprises a first material and the outer ring portion of the compression pad comprises a second material, the second material being harder than the first material."

Huang does not teach a second material as claimed that is harder than a first material as claimed. On the contrary, Huang teaches a liquid buffer in the annular chamber A. As this liquid buffer does not include a greater hardness than the material of the cushion coupler 3, Huang does not teach a second material (outer ring) as claimed that is harder than a first material (compression pad) as claimed.

Furthermore, if the Huang prosthesis were to be *pro arguendo* modified such that the liquid buffer were replaced by a harder, non-liquid material, the rotational surfaces (and overall prosthesis) of Huang would be rendered inoperable due to a loss of the lubricating taught in paragraph 0038. Accordingly, again, such a modification would be improper under MPEP 2143.01V.

For at least the above additional reasons, Applicant respectfully asserts that Applicant's claim 36 is neither anticipated by or obvious over the references cited in the Final Office Action of March 23, 2009.

Conclusion

Applicant believes that all of the outstanding objections and rejections have been addressed herein and are now overcome. Entry and consideration hereof and issuance of a Notice of Allowance are respectfully requested.

Applicant hereby petitions for any extension of time under 37 C.F.R. 1.136(a) or 1.136(b) that may be necessary for entry and consideration of the present Reply.

If there are any charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

The Office is invited to contact applicant's attorneys at the below-listed telephone number concerning this Amendment or otherwise regarding the present application.

Respectfully submitted,
CANTOR COLBURN LLP

By: /Daniel R. Gibson/
Daniel R. Gibson
Registration No. 56,539
CANTOR COLBURN LLP
20 Church Street
22nd Floor
Hartford, CT 06103
Telephone: 860-286-2929
Facsimile: 860-286-0115
Customer No. 23413

Date: September 22, 2009